Please type	(+) agle eulg	inside this box	. →	+
-------------	---------------	-----------------	-----	---

PTC/SB/08A (10-96)
Approved for use through 10/31/99, OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Order the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

1 of 6

Complete If Known				
Application Number	10/802,505			
Filing Date	March 16, 2004			
First Named Inventor	SAFWAT, Sherif			
Group Art Unit	3643			
Examiner Name	Darren W. Ark			
Attorney Docket Number	2195CON2			

				U.S. PATENT DOCU	MENTS	
Examiner Initials	Cite No.1	U.S. Patent	Kind Code? (# known)	Name of Palentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pepes, Columns, Lines, Where Relevant Pessages or Relevant Figures Appear
TA		1,026,		OTOMAMAY	05/14/12	
		1,552,		BROCKER	09/01/25	
		1,689,		EVANS	10/23/28	
		1,695,	595	LARNED	12/18/28	
		1,897,		ANDREWS	02/14/33	
		2,162,	115	PAULS	06/13/39	
		2,511,	057	GUTHRIE, et.al.	06/13/50	
		2,590,		THOMPSON, Jr., et.al.	03/25/52	
		2,792,		HALLER	05/21/57	
		2,816,		HARRIS, et.al.	12/17/57	
		2,823,	576	NEEDHAM, et.al.	02/18/58	
\Box		2,999,		MOMOI	09/12/61	
		3,041,	915	RYFFEL	07/03/62	
		3,102,	357	LUKETA	09/03/63	
		3,129,	632	STARR	04/21/64	
		3,131,	501	LUKETA	05/05/64	
\Box		3,153,	297	GRABOWSKY	10/20/64	
		3,308,	567	LUKETA	03/14/67	
		3,369,	317	BROWNELL	02/20/68	
Y		3,606,	B15	YAMASHITA, et.al.	09/21/71	

_			Foreign Patent Document	Name of Patentee or	Date of Publication of	Pages, Columns, Lines,	Т
etaliner nitlata	Cite No. ¹	Опісе 3	Number ⁴ (# known	Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	r
DA		DE	3543253 A1	Perevoschikov, et al.	06/1987		Т
		FR	2521065	Cassert, et al.	08/1983		Т
		JP	57-13660		03/1982		\top
		JP	59-71630		04/1984		1
		JP	60-30630		02/1985		1
		JP	60-39782	Horie	03/1982		1
		JP	60-88160		05/1985		1
V		JP	60-139860		07/1985		1
Y		JP	61-386	Horie	08/1986		1

وينهم والمناز والمراجع والمتكافر والمناز والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع			
Examiner /	Date	~ <i>l</i>	
		9/11/02	
Signature XVAWW W x CM	Considered	11414	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Petent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter-code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST, 16 if possible. 4 Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box \Rightarrow 👍

PTO/SB/08A (10-96)
Approved for use through 10/31/99, OMB 0651-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitu	te for form 1449A/I	PTO		Complete If Known		
				Application Number	10/802,505	
INF	ORMATIO	N DIS	SCLOSURE	Filing Date	March 16, 2004	
STATEMENT BY APPLICANT				First Named Inventor	SAFWAT, S.	
• • • • • • • • • • • • • • • • • • • •		_ , .		Group Art Unit	3643	
	(use as many a	heets as	necessary)	Examiner Name	Darren W. Ark	
Sheet	2	of	6	Attorney Docket Number	2195CON2	

	. [U.S. Patent Documen	42.4.4.4.4.4.4.4	Date of Publication of	Pages, Columns, Lines,
reminer ritials	Cite No.1	Number Kind Cod) or Case Document	Cited Document MM-DD-YYYY	Where Relevant Pessages or Relevant Figures Appear
721		4,356,654	TREKEL, et. al.	11/02/82	
$\neg \neg$		4,378,725	HOSPERS, et al.	04/05/83	
\neg		4,457,959	DORNHEIM, et al.	07/03/84	
		4,466,331	MATHESON	08/21/84	
		4,521,986	KOGA	06/11/85	
\neg		4,619,108	HOTTA	10/28/86	
1		4,947,727	момої	08/14/90	
$\neg \neg$		5,339,657	McMURRAY	08/23/94	
T	TÎ	5,453,190	MARTIN, SR.	09/26/95	
		5.622,094	REXROAD	04/22/97	
\neg		5,694,755	FRØYSTAD	12/09/97	
\neg		5,752,459	REXROAD	05/19/98	
		5,860,350	REXROAD	01/19/99	
V		6,374,531 B	SAFWAT, et al.	04/23/02	
			,		
			T		

				FOR	EIGN PATENT DOCUMEN	rs		
Examiner elaitini	Cite No.1	Office ³		Cadel nown)	Applicant of Cried Obcument	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Pessages or Relevant Figures Appear	T.e
M		RU	524876		Aljoshin, et al.	11/1976		I
المرا		RU	1444981			12/1986		
		RU	1480792	A1	Perevoschikov, et al.	05/1989		1
		WO	91/01633		Theret, et al.	02/1991		1
		WO	95/06405		Carlsen, et al.	03/1995		1
×		wo	97/13407		Safwat, et al.	04/1997		
		\vdash						↓_
								1_
					<u> </u>			1
i I								

Examiner	10-	61.	6.1	Date	0	1/1	NU:	
Signature	Laver	~	m	Considered	_//	14	IUT	

^{*}EXAMINER: tritial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

⁻L'Unique citation designation number,-2 See attached Kinds of U.S. Patent Documents,-3 Enter Office that issued the document, by the two-latter-code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST, 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Processory to a plus sign (+) inside this box

Approved for use through 10/31/89, OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number.

Subatitude	for form 14498/	חזפי		Complete if Known		
					10/802,505	
INFO	RMATIC	ON DISC	CLOSURE	Filing Date	March 16, 2004	
STATEMENT BY APPLICANT				First Named Inventor	SAFWAT, Sherif	
UIA			LIOAM	Group Art Unit	3643	
	(use as mar	ny sheets as i	necessery)	Examiner Name	Darren W. Ark	
Sheet	3	of	6	Attorney Docket Number	2195CON2	

	الما	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the
Examiner Initials	Cita No.1	äem (book, megazine, journal, serial, symposium, catalog, etc.), date, page(s), votume-issue number(s), publisher, city and/or country where published.
rΛ		Batill, S. M., et al., "An Experimental Investigation of the Flow Field
TH		Around Yawed Stranded Cables," Contract No. N00014-83K-0239,
		Rept. No. CR 2210-89-1, University of Notre Dame, Notre Dame, Indiana (1989)
M		Batill, S. M., et al., "Flow Field Studies on Yawed, Stranded Cables," in Flow Visualization, Reznicek V. R. ed., Hemisphere Publishing Corp.,
M	-	pp.391-396 (1990)
	-	pp.331-330 (1330)
		Batill, S. M., et al., "Detailed Near Surface Flow ABout Yawed, Stranded
M	!	Cables", Contract No. N00014-83K-0239, Rep. No. CSS CR 1210-92-1,
V		University of Notre Dame, Notre Dame, Indiana (1992)
		Breidenthal, R., Phus. Fluids, Vol. 23, No. 10, p. 1931 (1980)
		, , , , , , , , , , , , , , , , , , , ,
$\overline{\mathbb{M}}$		Cermak, J.E., "Aerodynamics of Buildings," Annual review of Mechanics 8 p. 99 (1976)
M		Diggs, J. S., "Hydrodynamic Characterization of Various Towed Array Towcables," Tech. Rpt. No. 128, Contract No. N00600-73-D-1077,
•		Mar, Incorporated (1974)
M		Endeco, Inc., "Haired Faired Cable," Endeco Towed Systems (date unknown)

[Signature Considered	Examiner Signature	Danea W. ask	Date Considered	9/4/04
--------------------------	-----------------------	--------------	--------------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the Individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number, 2 Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid CMB control number.

Sub-tib to	for form 1449B/	PTO		Complete if Known		
				Application Number	10/802,505	
INFO	RMATIC	ON DIS	CLOSURE	Filing Date	March 16, 2004	
STA	TEMENT	T RY AS	PPLICANT	First Named Inventor	SAFWAY, Sherif	
017		DI A	Lioniii	Group Art Unit	3643	
	(use as mai	ny sheets as i	necessary)	Examiner Name	Darren W. Ark	
Sheet	4	of	6	Attorney Docket Number	2195CON2	

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
TA		Flugwiss, Z., Weltraumforsch 14, p. 40 (date unknown)	
A		Garner, J. "How to Make and Set Nets or The Technology of Netting," Fishing News Books Ltd., 1962	
TA	,	Hoerner, S. F., "Fluid-Dynamic Drag," published by author, pp. 3-2 and 4-4 (1965).	
DA		Hoerner, S. F., "III-Pressure Drag," published by author, pp. 3-7,3-9, 3-11 and 3-27 (1965).	
TA		Hoerner, S. F., "IV-Structures," published by author, p.4-5 (1965).	
DA		Hunt, J. C. R., "Industrial and Environmental Fluid Mechanics," Annual Review of Fluid Mechanics 23, pp. 10-12 (1991).	
M		Klust, G., "Netting Materials for Fishing Gear", Fishing News Books Ltd., 1973	
124	-	"Knuckleballs," Scientific American, p. 22 (1987)	
DA	_	Lisoski graph, Fig. 7, Experimental Lift and Drag Histories for Bluff Plate, p. 95 (1993).	
W		Mehta, R. D., "Aerodynamics of Sports Balls," Ann. Rev. Fluid Mech. 17:151-189 (1985).	
M		Nebres, J. V., "Flow Around Yawed Stranded Cables," Master's Thesis, University of Notre Dame, Notre Dame, Indiana (1989).	

Examiner Signature	Davon W. Cul	Date Considered 9/4/64

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

PTO/S8/088 (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

S. Jacks	e for form 1449B/	PTO		Complete if Known			
					10/802,505		
INFC	RMATIC	ON DISC	CLOSURE		March 16, 2004		
AT2	TEMEN	T RY AF	PPLICANT	First Named Inventor	SAFWAT, Sherif		
JIA	,		LIOAIII	Group Art Unit	3643		
	(use as mai	ny sheets as i	necessery)	Examiner Name	Darren W. Ark		
Sheet	5	of	6	Attorney Docket Number	2195CON2		

Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, megazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-issue number(s), publisher, city and/or country where published.	Ţ
1		Nebres, J. V., "Wake Similarity and Vortex Formation for	
IH		Two-Dimensional Bluff Bodies," Doctoral Dissertation, University	
	L	of Notre Dame, Notre Dame, Indiana (1992)	F
M		Oceanographic Ribbon Fairing Cable, The Rochester Corporation, Cat-82 (date unknown)	
DA		Roshko, A., "Perspectives on Bluff Body Aerodynamics," Second International Colloquium on Bluff Body Aerodynamics	
		and Application, Melbourne, 7-10, pp. 81 (1992)	
TA		"On the Persistence of Transition in the Near-Wake," pp. 607 and 609. Problems of Hydrodynamics and Continum Mechanics, Soc.	
		Industrial and Appl. Math., Philadelphia (1969)	
TA		"Examples of Spectrum products, specific projects and end-users," Spectrum Ocean Systems Limited, Peterborough, Ontario	-
		(date unknown)	
jA		"Fairing and Anti-Stacking Ring Assemblies for Tow Cables," Spectrum Ocean Systems Limited, Peterborough, Ontario (date unknown)	
A		Williamson, C. H. K., "Oblique and Parallel Modes of Vortex Shedding in the Wake of a Circular Cylinder at Low Reynolds Numbers," Journal of Fluid Mechanics 206:595 and 597, 1989	-

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the Individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.-Include copy of this form with next communication to applicant.-

¹ Unique citation designation number, 2 Applicant is to place a check mark here if English language Translation is attached.

Please type	eulg	sign	(+)	inside this	pox	→	+
	•	-				•	

PTC/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number.

C. hatthdo	for form 1449B	/PTO		Complete if Known				
				Application Number	10/802,505			
INFO	RMATIC	on dis	CLOSURE	Filing Date	March 16, 2004			
STAT	FMFN'	T RY A	PPLICANT	First Named Inventor	SAFWAT, Sherif			
יאוט		רוטו	LIOAN	Group Art Unit	3643			
	(use as ma	ny sheets es	necessery)	Examiner Name	Darren W. Ark			
Sheet	6	of	6	Attorney Docket Number	2195CON2			

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
. 1		The Zippertubing Co. product data sheets and bulletins for DVH-20 AND	
12		DVH-40 cable fairings, specifications, and installation (date unknown)	
)			
			i
			ليا
Examiner Signature		Date Considered 9/4/04	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is etteched.